

REQUEST FOR RECONSIDERATION

Applicants thank Examiner Egwim for the helpful and courteous discussion of April 13, 2005 during which Applicants' U.S. counsel suggested replacing the original claims with process and product claims.

Claims 14-38 are new claims. Applicants submit the newly added claims obviate the objection under 37 C.F.R. § 1.75(c) and 35 U.S.C. § 112, second paragraph, and 35 U.S.C. § 101.

New independent Claim 14 is drawn to a method for making an abrasive material. In the claimed method an aqueous polymer dispersion comprising an abrasive grit is dried to form an abrasive material.

New independent Claim 27 is drawn to an abrasive material. The abrasive material of new independent Claim 27 comprises a dried mixture of an abrasive grit and an aqueous polymer dispersion.

One of the features of the present independent claims is the presence of a polymer A1 having a glass transition temperature within a certain range (i.e., -20°C to +35°C).

Applicants have described a method for making an abrasive material and an abrasive material. The abrasive material of the claims provides significantly improved performance in comparison to other abrasive materials. To demonstrate the effectiveness of the claimed abrasive materials and method for making an abrasive material, Applicants have provided Inventive and Comparative Examples in the specification as originally filed. On page 22 of the specification, Table 1 provides the compositions of various Comparative and Inventive Examples. None of the Comparative Examples meet the requirements of the present claims that a polymer A1 having a glass transition temperature of from -20°C to +35°C is present. Table 1 is reproduced below for convenience. The column that is third from the left in Table below shows the glass transition temperature (T_g).

The Inventive abrasive material provides improved performance in comparison to other abrasive materials as evidenced by the breaking strength, breaking extension and steel abrasion properties of the abrasives shown in the Table. Table 2 on page 23 contrasts the Comparative Examples and the Inventive Example. The Inventive Example has the highest breaking force (i.e., 44.9 N/mm²); the highest breaking extension (e.g., 24.0%); and the highest steel abrasion (e.g., 0.65%).

Table 1

	Copolymer (polymer A1)	Tg (calc.) [°C]	SC [%]	Viscosity [mPas, 250 s ⁻¹]	pH
Comparative example A	(95BA/5HEA)	-43	50.9	2060	3.5
Comparative example B	(80EHA/20MMA)	-50	48.5	1110	3.4
Comparative example C	(80BA/20AN)	-23	49.2	1120	3.5
Comparative example D	(60BA/30EA/10S)	-24	49.1	1110	3.3
Comparative example E	(72S/26MMA/2MAS)	107	49.3	755	3.4
Example 1	(50S/45BA/5HEA)	14	49.2	1080	3.5

Table 2

	Breaking force [N/mm ²]	Breaking extension [%]	Abrasion - steel [%]
Comparative example A	35.2	12.0	0.5
Comparative example B	30.7	10.7	0.49
Comparative example C	43.0	13.0	0.49
Comparative example D	34.4	10.0	0.43
Comparative example E	26.5	10.0	0.32
Example 1	44.9	24.0	0.65

Applicants submit that an abrasive material made with the claimed process is significantly superior to abrasive materials not made from the aqueous dispersion recited in the claims. Applicants therefore submit that the claimed invention is not obvious in view of other polymer-containing abrasive materials.

Applicants submit the amendment to the claims obviates the rejections of the Office Action of March 16, 2005. Applicants respectfully request the withdrawal of the rejections and the allowance of all now-pending claims.

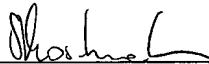
Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)



Stefan U. Koschmieder, Ph.D.
Registration No. 50,238

NFO:SUK\la